

## **REMARKS**

Reconsideration of this application is hereby respectfully requested.

By this Amendment, Claims 1 to 4, inclusive, are being cancelled and new Claims 5, 6, 7 and 8 are being substituted therefor. This action is being taken in an effort to more particularly point out and distinctly claim Applicant's invention.

The present invention is directed to a new and improved riffle distributor assembly for delivering pulverized solid fuel from an exhaustor having a downstream open end to a pair of branch ducts each having an upstream end for distribution to at least a pair of burners in a combustion vessel in order that the pulverized solid fuel can be combusted in a combustion process in the combustion vessel. The new and improved riffle distributor assembly comprises a plenum forming an enclosed space extending from the downstream open end of the exhaustor to the upstream end of each of the pair of branch ducts, and a plurality of riffle element plates supported within the plenum. Each of the plurality of riffle element plates has an intake opening. Each intake opening of each of the plurality of riffle element plates being formed by a vane subassembly. The vane subassembly includes a parallelepiped frame and a plurality of intake vanes. The parallelepiped frame has a first side panel and a second side panel. The parallelepiped frame further has a track formed therein extending the length of the parallelepiped frame in a first direction. Each of the plurality of intake vanes has a first side and a second side, and each of the plurality of intake vanes is pivotally connected by a pivot connection to a respective one of the plurality of riffle element plates. A slide drive is slidably supported in the track for sliding movement of the slide drive along the track in the first direction. The slide drive includes a plurality of cut-outs. The first side of each of the plurality of intake vanes is pivotally mounted at a respective pivot location to the slide drive such that a portion of each of the plurality of intake vanes extends into a respective one of the plurality of cut-outs. The respective pivot location at which each of the plurality of intake vanes is pivotally mounted to the slide drive is spaced in a second direction from the respective pivot connection at which each of said plurality of intake vanes is pivotally connected to the respective one of the plurality of riffle element plates. The second side of each of the

**Objections to the Figures of the Drawings:**

In the Office Action of November 16, 2004, the drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: feed path 36, vane adjustment device 54, track 117. Accordingly, replacement sheets for Figures 1, 6 and 8a of the Drawing are being submitted herewith for the purpose of adding i) reference sign 36 to Figure 1, ii) reference sign 54 to Figure 6, and reference sign 117 to Figure 8a. With the submission of these Replacement Sheets, Applicant respectfully submits that the drawings are no longer subject to objection as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: feed path 36, vane adjustment device 54, track 117.

plurality of intake vanes is pivotally mounted to a respective pivot bore formed in a first side panel of the parallelepiped frame.

Reconsideration is hereby respectfully requested of the rejection of Claims 1-3 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention insofar as this rejection may be deemed to be applicable to new Claims 5, 6, 7 and 8, the only claims remaining under consideration in the instant application.

With respect to the rejection of Claims 1-3 under 35 U.S.C. 112, second paragraph, the Examiner states the following:

“Claim 1 recites the limitation ‘the reference angle’ in line 19. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation ‘the means for relatively moving’ in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation ‘the means for relatively moving’ in line 1. There is insufficient antecedent basis for this limitation in the claim.”

Since neither the limitation “the reference angle” nor the limitation “the means for relatively moving” is recited in any of new Claims 5, 6, 7 and 8, Applicant respectfully submits that new Claims 5, 6, 7 and 8 are not such subject to rejection under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention because of the recitation of “the reference angle” and/or “the means for relatively moving”.

Reconsideration is respectfully requested of the rejection of Claims 1-3 under 35 U.S.C. 102(e) as being anticipated by Levy et al.(6,789,488); and of the rejection of Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Levy et al. (6,789,488) in view of Briggs et al. (5,685,240); insofar as either one or both of these rejections

may be deemed to be applicable to new Claims 5, 6, 7 and 8, the only claims remaining under consideration in the instant application.

With respect to the rejection of Claims 1-3 under 35 U.S.C. 102(e), the Examiner states that:

“Levy et al shows 1 [sic] means forming a feed path along which material is enroute from the material supply source to the delivery location (fig.1, fig.2), the feed path passing through an upstream passage and the feed path including one branch having a branch entry downstream of the upstream passage and another branch having a branch entry downstream of the upstream passage (fig. 2), the stream of material traveling through the upstream passage thereafter separating into at least two portions with one portion of the material entering the one branch through its branch entry and thereafter traveling along the one branch and another portion of the material entering the another branch through its branch entry and thereafter traveling along the another branch in a manner in which the another portion of the material and the one portion of the material are segregated from one another during their respective travel along the one branch and the another branch (fig. 2), and a riffle distributor assembly movable along a lateral axis perpendicular to the reference axis such that the one portion of the material and the another portion of the material, prior to their respective segregated travel along the one branch and the another branch (fig.7, fig.8), are comprised in unseparated manner in the stream of material as it travels through the upstream passage and the portions of the material thereafter travel in segregated manner in their respective branches with the travel properties of the one portion of the material in the one branch being different than its travel properties before the movement of the one branch entry relative to the reference axis (col.1, lines 11-14), the means for relatively moving includes means for axially moving the one branch entry relative to the upstream passage (131, 132, fig. 27), the means for relatively moving includes means for moving the one branch entry relative to the upstream passage along an adjustment axis extending perpendicularly to the reference axis (131, 132, fig. 27).”

With respect to the rejection of Claim 4 under 35 US.C. 103(a), the Examiner states that:

“Levy discloses at least a pair of burners for injecting pulverized solid fuel into the combustion vessel (fig. 1), - - - for effecting delivery of a single stream of pulverized solid fuel from a pulverizer to the pair of burners such that the pulverized solid fuel supplied from the pulverizer is apportioned between the pair of burners whereupon a respective portion of the pulverized solid fuel is injected through one of the burners at the same time that another respective portion of the pulverized solid fuel is injected through the other one of the pair of burners (fig. 1); and a riffle distributor assembly movable lateral for influencing a travel property of the pulverized solid fuel moving between the one pulverizer and the pair of burners so as to thereby change the apportionment of the pulverized solid fuel injected through the pair of burners (fig. 7, 8). Levy discloses applicant’s invention substantially as claimed with the exception of an exhauster. Briggs teaches an exhauster for the purpose of providing the motive force the material. It would have been obvious to one of ordinary skill in the art to modify Levy by including an exhauster as taught by Briggs [sic] for the purpose of providing the motive force to move the material so that the apparatus will operate.”

For the reasons now to be set forth, Applicant respectfully submits that the new and improved riffle distributor assembly to which his invention is directed is neither taught nor even suggested by the teachings of Levy et al (6,789,488) or by the teachings of Briggs et al (5,685,240), either when the teachings thereof are considered individually or when they are taken collectively.

Applicant would respectfully submit that neither of the references relied by the Examiner in the Office Action of November 16, 2004 contains, by way of exemplification and not limitation, either a teaching or even a suggestion of

“said riffle distributor assembly comprising:

a plenum forming an enclosed space extending from the downstream open end of the exhauster to the upstream end of each of the pair of branch ducts;

a plurality of riffle element plates supported within said plenum, each of said plurality of riffle element plates having an intake opening;

each intake opening of each of said plurality of riffle element plates being formed by a vane subassembly;

said vane subassembly including a parallelepiped frame and a plurality of intake vanes;

said parallelepiped frame having a first side panel and a second side panel, said parallelepiped frame further having a track formed therein extending the length of said parallelepiped frame in a first direction;

each of said plurality of intake vanes having a first side and a second side, and each of said plurality of intake vanes being pivotally connected by a pivot connection to a respective one of said plurality of riffle element plates;

a slide drive slidably supported in said track for sliding movement of said slide drive along said track in said first direction, said slide drive including a plurality of cut-outs;

said first side of each of said plurality of intake vanes being pivotally mounted at a respective pivot location to said slide drive such that a portion of each of said plurality of intake vanes extends into a respective one of said plurality of cut-outs;

said respective pivot location at which each of said plurality of intake vanes is pivotally mounted to said slide drive is spaced in a second direction from the respective pivot connection at which each of said plurality of intake vanes is pivotally connected to the respective one of said plurality of riffle element plates; and

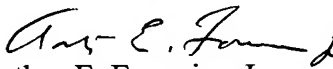
said second side of each of said plurality of intake vanes being pivotally mounted to a respective pivot bore formed in a first side panel of said parallelepiped frame.”

New Claims 6, 7 and 8 each traces its dependency to new Claim 5 and, therefore, necessarily incorporates all of the limitations of new Claim 5, which Applicant respectfully submits for the reasons set forth hereinabove are neither taught nor suggested by the Levy et al reference or by the Briggs et al reference, either when considered individually or when taken collectively. In addition, new Claim 6 defines each of the plurality of intake vanes as being movable between a zero offset position and an offset position. New Claim 7 defines the rifle distributor assembly of Claim 6 as further comprising an intake vane adjustment device. New Claim 8 defines the

rifle distributor assembly of Claim 5 as further including dual separator plates mounted between each adjacent pair of the plurality of riffle element plates/

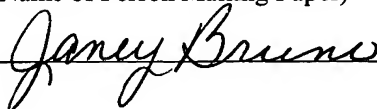
In view of the above amendments and remarks, it is respectfully submitted that new Claim 5 as well as new Claims 6, 7 and 8 which each trace their dependency to new Claim 5, the only claims remaining under consideration in the instant application, are clearly allowable over the references relied on by the Examiner, and that this case is clearly in condition for allowance, and such action is accordingly respectfully requested.

Respectfully submitted,

  
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Janey Bruno  
(Typed or Printed Name of Person Mailing Paper)  
  
(Signature)